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Lab Laurels
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SAMPE honors ML's Abrams with fellow nod

by Gary Cunningham, Materials and Manufacturing Directorate

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The Society for the Advancement of Materials and Process Engineering (SAMPE) has elected Dr. Frances L. Abrams a "Fellow of the Society." Induction of new Fellows takes place during the annual International SAMPE Symposium and Exhibition each May in Long Beach, Calif.

Abrams, a senior engineer for the Manufacturing Technology (ManTech) Division of the Air Force Research Laboratory's Materials and Manufacturing Directorate, has long been considered one of the leading experts in the world in the processing of advanced composites.

"I was surprised, and extremely pleased when I learned of the honor," Abrams said. "If you work in advanced composites as I have, there can be no higher honor than this. It's truly gratifying," she said.

Her selection as a fellow celebrates a long history of exemplary public service to her country through the application of her knowledge in composite processes that improve, sustain and cut the manufacturing costs of Air Force weapon systems. She is considered a role model for many of today's composite technology specialists.

A native of Oregon, Abrams received her bachelor's degree in chemistry from Colorado State University in 1975, a second bachelor's degree from the University of Dayton (UD) in Chemical Engineering in 1981, and completed her doctorate work in materials engineering from the UD in 1995. Abrams began her work at AFRL in 1979 under a co-op program for engineering students at UD. She accepted a full-time position as a materials engineer with the laboratory in 1980.

"Once I started here (AFRL), I never wanted to work anywhere else," explained Abrams. "The people were friendly and helpful, the work was exciting and rewarding, and I found that, for a composites engineer, Wright Patterson is a crossroads for information about what's happening in the (composites) industry worldwide."

Regarded highly for her work in phenolic (a resin) processing, as well as advanced ablative (a protective coating) and carbon-carbon propulsion materials and components, Abrams' contributions to composite processing are recognized throughout government and industry circles. She has served as a materials and process consultant to numerous Air Force and National Aeronautics and Space Administration systems solving real time process control issues. She has planned for, performed research in, or managed many of the leading composite materials and processing initiatives over the past two decades. Currently, Abrams is the program manager for the Department of Defense and industry's Composites Affordability Initiative's Systems Engineering Team, providing leadership and technical expertise to the Air Force, Navy and the U.S. airframe industry. @